

Facility Permit No. 54-03-CDLF-1997 Lenoir County C&D Landfill Permit to Operate April 2, 2012 Doc. ID 16373 Page 1 of 21

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Division of Waste Management

Beverly Eaves Perdue Governor Dexter R. Matthews
Director

Dee Freeman Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL Permit No. 54-03-CDLF-1997

LENOIR COUNTY is hereby issued a

PERMIT TO OPERATE

LENOIR COUNTY CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL PHASES 1, 2, AND 3

A C&D LANDFILL UNIT ON TOP OF A CLOSED MSW LANDFILL

AND POST-CLOSURE CARE REQUIREMENTS FOR THE CLOSED MSWLF

Located at Hodges Farm Road (SR 1524), in La Grange, Lenoir County, North Carolina, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment 1 of this permit.

cn=Edward F. Mussler III, P. E., o=Solid Waste Section, ou=NC DWM, email=ed. mussler@ncdenr.gov, c=US 2012.04.02 09:54:44 -04'00'

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ATTACHMENT 1

PART I: PERMITTING HISTORY

Permit Type	Date Issued	Doc ID No.
PTO C&DLF Phase 1, modification No. 1	December 30, 1997	11651
PTO C&DLF Phases 1 & 2, modification No. 2	January 23, 2001	11652
PTO C&DLF Phases 1 & 2, modification No. 2 (one	December 30, 2002	11653
year extension)		
PTO C&DLF Phases 1 & 2 modification No. 3	January 25, 2006	11654
PTO C&DLF Phases 1, 2, & 3 in compliance with	April 2, 2012	16373
Rule 15A NCAC 13B .0547(4)		

- 1. From 1982 to October 1998 the Lenoir County Municipal Solid Waste Landfill (MSWLF) operated on the landfill property of 108.94 acres as a permitted MSWLF under Permit No. 54-03, with a disposal area of approximately 47 acres. The landfill was not constructed with a liner below the waste, and the incremental closure of the landfill was started in 1994 and completed and certified in March 2000. The recorded in-place-waste volume of the closed MSWLF is not available.
- 2. In 1997, the transition plan for the MSWLF included a permit modification request to construct and operate a Construction and Demolition Debris Landfill (C&DLF) on top of the closed MSWLF. The C&DLF would be incrementally developed by phases and with a total air space of 1,039,420 cubic yards (CY). On December 30, 1997 the C&DLF Phase 1 on top of the closed MSWLF was approved with a disposal area of 18 acres and began receiving C&D wastes.
- 3. From 2002 to 2006, the permit modifications of the 1997 transition plan were approved for continued operations of Phases 1 and 2.
- 4. In 2008 pursuant to the Solid Waste Management Rule 15A NCAC 13B 0.547(4), Lenoir County requested a continued operation of the 18- acre C&DLF, with a total gross capacity of 1,126,540 CY, having the final fill of 3 to 1 side slopes at final grade elevation of 216 feet above mean seal level (amsl).
- 5. The landfill property is immediately connected to the property of the Sub-title D lined Municipal Solid Waste Landfill, operated from 2004 to the present. The conditions for the operation of this MSWLF are covered under a separate permit, Permit No. 54-09.

PART II: LIST OF DOCUMENTS FOR APPROVED PLAN

- 1. Modification #1: Site and Construction Transition Plan modification application for the Lenoir County Landfill, Permit # 54-03. Document titled "Construction and Demolition Landfill for Lenoir County, North Carolina". 19 December 1997.
- 2. Modification #2: Permit document dated 1 October 2002 requesting the operations of C&D unit be extended for one year for Phase 1, per SHEET NO. 1 of 5/DRAWING No. E1 to an elevation of 108 feet amsl.
- 3. Modification #3: Revised Life Expectancy Calculations dated 12 February 2004 and permit drawings dated 12 February 2004.
- 4. Corrective Action Plan. Prepared for: Lenoir County Landfill Permit #54-03, La Grange, Lenoir County, North Carolina. Prepared by: Municipal Engineering Services Company, P.A. February 13, 2009 and revised through March 23, 2012 (Doc ID 16358) including the revised Groundwater and Surface Water Sampling & Analysis Plan dated March 23, 2012 (Doc ID 16357).
- 5. Permit Application for Continued Operation, Lenoir County Construction and Demolition Landfill Facility, Permit Number 5430-CDLF-1997. Prepared by: Municipal Engineering Services Company, P.A. June 2008 and revised through November, 2011 (Doc ID 16377).

PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Lenoir County, N.C. Register of Deeds				
Book	Page	Grantor	Grantee	Acres*
		Tyson H. Creech &		1
674	30	Wife Laurah H.	Lenoir County	108.94
074	50	WHE Lauran H.	¥	108.94 Acreage: 108.94

^{*} The landfill facility property, including buffers, occupies approximately 108.94 acres. The waste footprints of the closed MSWLF encompass approximately 47 acres. The actual disposal area of the C&DLF is approximately 18 acres and located on top of the closed MSWLF.

PART IV: GENERAL PERMIT CONDITIONS

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Operate for Phases 1, 2, & 3 shall expire April 2, 2017. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.

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- 2. The persons to whom this permit is issued ("permittee") are the owners and operators of the solid waste management facility.
- 3. This permit shall not be effective until the certified copy of this permit which references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit, affixed with the Register's seal and the date, book, and page number of recording must be returned to the Section within 30 calendar days of issuance of this permit. If the Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, then and in that event, the permit is suspended and of no effect until the date the Section receives the certified copy of the recorded permit.
- 4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer must contain in the deed description section, in no smaller type than that used in the body of the deed or instrument, a statement that the property has been used as a sanitary landfill and a reference by book and page to the recordation of the permit.
- 5. By beginning construction or receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
- 6. Construction and operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules (Rule), 15A NCAC 13B, Article 9 of Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit, and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.
- 7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, "List of Documents for Approved Plan," and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.
- 8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g), the permittee must notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to, a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.
- 9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for

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sedimentation and erosion control, and a General or Individual National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit, if applicable. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

- End of Section -

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ATTACHMENT 2 CONDITIONS OF PERMIT TO CONSTRUCT

1. Construction of any C&DLF future phases or cells requires written approval of the Section. Application for a Permit to Construct must be prepared in accordance with applicable statutes and rules in effect on that date and will be subject to a permitting fee.

- End of Section -

ATTACHMENT 3 CONDITIONS OF PERMIT TO OPERATE

PART I: OPERATING CONDITIONS

- 1. The Permit to Operate for Phases 1, 2, and 3 shall expire April 2, 2017. Pursuant to Rule 15A NCAC 13B .0201(g), no later than December 2, 2016, the permittee must submit to the Section:
 - a. A permit amendment application prepared in accordance with Rule 15A NCAC 13B .0535 (b), and
 - b. A Corrective Action Evaluation Report to demonstrate the effectiveness of the implemented corrective action program in accordance with Rule 15A NCAC 13B .0547(4)(c) and the approved Corrective Action Plan (Attachment 1, Part II, Document No. 4).
- 2. This permit approves the continued operation of the C&DLF Phases 1, 2, and 3 on top of the closed MSWLF, the new Facility Plan, the other miscellaneous solid waste management units, and the onsite environmental management protection facilities as described in the approved plans. Operation of any C&DLF future phases or cells requires written approval of the Section and must be constructed in accordance with applicable statutes and rules in effect at the time of review.
- 3. The following table lists the dimensions and details for the C&DLF on top of the closed MSWLF. Total gross capacity for the C&DLF unit is 1,126,540 cubic yards (CY) and defined as the volume measured from the bottom of C&D waste (the top of the cover system of the closed MSWLF) through the top of final cover of the C&DLF at an elevation of 216 feet amsl with the final fill of 3 to 1 side slopes as shown on Drawing No. F5 /Sheet 7 of 7. The estimated service life of the facility is through 2033, as stated in the approved Facility Plan, (Attachment 1, Part II, Document No. 5).

C&DLF Unit	Acres ¹	Gross Capacity ²	Estimate Service	Status
		(cubic yards)	Life	
Phase 1 - 2	10.19	509,567	=	Filled
Phase 3	7.81	120,865	5.06	Constructed
Phase 4	_	129,090	5.3	To be developed
Phase 5	-	125,572	5.05	To be developed
Phase 6		154,326	6.08	To be developed
Total	18	1,039,420	21.49	

Notes:

1. Phases 4, 5, and 6 are vertical expansions over the 18-acre waste footprints.

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- 2. The approved total gross capacity of 1,126,540 CY includes volumes of the air space (1,039,420 CY) approved in 1997 and of the final cover system (87,120 CY).
- 4. The permittee must maintain permanent markers that accurately identify the edge of the approved waste disposal boundary. The boundaries of both the C&DLF unit and the closed MSWLF unit must be marked.
- 5. The incremental fill operations of C&D wastes for Phases 1, 2, & 3 must be contained within the approved elevation contours and the maximum approved fill elevation at 124 feet amsl as shown on Drawing No. CD2/ Sheet 4 of 8 through Drawing No. CD6/ Sheet 8 of 8 (Attachment 1, Part II, Document No. 5).
- 6. This facility is permitted to receive the following wastes for disposal in the C&DLF:
 - a. "C&D solid waste" as defined in Rule 15A NCAC 13B .0532(8) means solid waste generated solely from the construction, remodeling, repair, or demolition operations on pavement and buildings or structures. C&D waste does not include municipal and industrial wastes that may be generated by the on-going operations at buildings or structures.
 - b. "Inert debris" as defined in NCGS 130A-290 (a)(14) means solid waste that consists solely of material such as concrete, brick, concrete block, uncontaminated soil, rock, and gravel.
 - c. "Land-clearing debris" as defined in NCGS 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, limited to stumps, trees, limbs, brush, grass, and other vegetative material.
 - d. "Asphalt" in accordance with NCGS 130-294(m).
 - e. Solid waste that is generated by mobile or modular home manufacturers and asphalt shingle manufacturers in Lenoir County. The waste must be source separated at the manufacturing site and must exclude municipal solid waste, hazardous wastes, and other wastes prohibited from disposal at this landfill. It must be transported to the landfill in a shipment or container that consists solely of the separated waste to be disposed.
- 7. Regulated-asbestos containing material as defined in 40 CFR 61 must be managed in accordance with 40 CFR 61. Disposal of asbestos waste must be in accordance with Rule 15A NCAC 13B .0542 (c).
- 8. Wastewater treatment sludge is not approved for disposal. Wastewater treatment sludge may be accepted, with the approval of the Section, for utilization as a soil conditioner and incorporated into or applied onto the vegetative growth layer. The wastewater treatment sludge must not be applied at greater than agronomic rates nor to a depth greater than six inches.

- 9. Those wastes listed in Rule 15A NCAC 13B .0542 (e) must not be accepted for disposal, including, but not limited to, hazardous waste, municipal solid waste, liquid waste, commercial or industrial wastes, and yard trash.
- 10. Wooden pallets as defined in NCGS 130A-290(44a) are not approved for disposal except for those pallets generated in C&D activities. Wooden pallets generated from non- C&D activities may be accepted for processing into chips or mulches at the designated area in accordance with permit conditions stated in Part IV, Attachment 3 of this permit and the approved plan (Attachment 1, Part II, Document No. 5).
- 11. Yard trash as defined in NCGS 130A-290(a)(45) shall not be disposed in the C&DLF. However, yard trash along with land-clearing debris and wooden pallet can be accepted for processing and temporaryy storing at the Small Type-1 Composting Area, which must be operated in accordance with permit conditions stated in Part IV, Attachment 3 of this permit.
- 12. The facility is approved to accept C&D wastes at annual rate of approximately 23,868 CY per year in year 2009, with an increasing rate of 3.1% annually (14,320 tons per year or in an average of 50 ton per day based on 286 working days annually) in accordance with the approved plans. Maximum variance shall be in accordance with NCGS 130A-294(b1)(1).
- 13. This facility is permitted to receive C&D wastes generated from the Lenoir County, North Carolina.
- 14. The permittee must not knowingly dispose of C&D waste that is generated within the boundaries of a unit of local government that by ordinance:
 - a. Prohibits generators or collectors of C&D waste from disposing of that type or form of C&D waste.
 - b. Requires generators or collectors of C&D waste to recycle that type or form of C&D waste.
- 15. The facility operator must complete an approved operator training course in compliance with NCGS 130A-309.25.
 - a. A responsible individual certified in landfill operations must be on-site during all operating hours of the facility at all times while open for public use to ensure compliance with operational requirements.
 - b. All pertinent landfill-operating personnel must receive training and supervision necessary to properly operate the C&D unit in accordance with NCGS 130A-309.25 and addressed by memorandum dated November 29, 2000.
- 16. The permittee must actively employ a training and screening program at the facility prepared in accordance with Rule 15A NCAC 13B .0544(e) for detecting and preventing

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the disposal of excluded or unauthorized wastes. At a minimum, the program must include:

- a. Random inspections of incoming loads or other comparable procedures;
- b. Records of any inspections;
- c. Training of personnel to recognize hazardous, liquid, and other excluded waste types.
- d. Development of a contingency plan to properly manage any identified hazardous, liquid, MSW, or other excluded or unauthorized wastes. The plan must address identification, removal, storage, and final disposition of these wastes.
- 17. The use of alternative periodic cover requires approval, prior to implementation, by the Section. Requests for alternative periodic cover approval must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative cover, developed according to the Section guidelines. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Attachment 1.
- 18. Financial assurance must be continuously maintained for the duration of the facility in accordance with Rules 15A NCAC 13B .0547 (4)(e), 15A NCAC 13B .1628, and NCGS130A-295.2(h). During the active life of the C&DLF, the owner and operator must annually adjust the cost estimates including closure and post-closure activities for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s).
- 19. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act NCGS 113A-50, et seq., and rules promulgated under 15A NCAC 4. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
- 20. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.
- 21. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

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PART II: MONITORING AND REPORTING REQUIREMENTS

- 22. Groundwater and surface water monitoring must be conducted in compliance with Rules 15A NCAC 13B .1630 through .1637, and .0602, and the approved monitoring plan (Attachment 1, Part II, Document No. 4). Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation.
- 23. Groundwater quality is subject to 15A NCAC 2L Groundwater Classifications Standards and the Groundwater Protection Standards (GPS) established under Rule 15A NCAC 13B .1634(i). Surface water is subject to 15A NCAC 2B Surface Water and Wetlands Standards.
- 24. A total of seven (7) ground water wells (background well MW-1, assessment wells MW-3, MW-4, MW-6, MW-9, MW-11, & MW-12), and two (2) surface water locations (SW-1 and SW-2), comprise the approved groundwater and surface water monitoring network for the facility, unless otherwise specified by the Section (Attachment 1, Part II, Document No. 4, Doc ID 16358).
 - a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any monitoring well or corrective action program well.
 - b. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and corrective action program wells.
 - c. Each groundwater monitoring well and corrective action program well must be surveyed in accordance with Rule 15A NCAC 13B .1632 (d)(1).
 - d. Each groundwater monitoring well and corrective action program well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108(o).
 - e. Hydraulic conductivity and effective porosity values must be established for each screened interval in order to develop groundwater flow characteristics.
 - f. Within thirty (30) days of completed construction of each new groundwater monitoring well and corrective action program well, the well construction record (GW-1b form), well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned wells and piezometers, and hydraulic conductivity and effective porosity values, as described in subparagraphs c and e of this Permit Condition.
 - g. Within thirty (30) days of the abandonment of a groundwater monitoring well or corrective action program well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record must be submitted

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to the Section, consistent with 15A NCAC 2C .0114(b), and must be certified by a Licensed Geologist.

- h. Documentation of well completion, development details, repair, abandonment, and all other pertinent activities associated with each monitoring well and corrective action program well must be maintained in the facility operating record.
- i. A readily accessible, unobstructed path must be maintained so that monitoring wells, corrective action program wells, and surface water sampling locations are accessible using four-wheel drive vehicles.
- 25. The permittee must sample groundwater monitoring wells and surface water locations semi-annually unless otherwise specified by the Section. Surface water samples must be analyzed for constituents listed in Appendix I of 40 CFR Part 258, and groundwater samples must be analyzed for the constituents listed in Appendix I of 40 CFR Part 258 plus total mercury and for the constituents listed in Appendix II of 40 CFR Part 258 once every five years. Field parameters pH, temperature, conductivity, and turbidity are also required to be collected according to the approved monitoring plan (Doc ID 16357). Sampling frequency and sampling constituents are subject to change according to requirements of the applicable corrective action program.
- 26. Monitoring reports of the analytical results for surface water and groundwater monitoring sampling events, and for corrective action program monitoring, must be submitted to the Section within 120 days of the sample collection date. Analytical laboratory data must be submitted in electronic portable document format (pdf) and in a spreadsheet format in an Electronic Data Deliverable (EDD) Template. All monitoring reports must contain:
 - a. a potentiometric surface map for the current sampling event,
 - b. analytical laboratory reports and summary tables,
 - c. a completed Solid Waste Environment Monitoring Data Form, and
 - d. laboratory data submitted in accordance with the EDD Template.
- 27. All groundwater, surface water, corrective action program, and methane gas monitoring forms, reports, maps, plans, data, and correspondence submitted to the Section must include an electronic (pdf) copy.
- 28. The permittee must maintain a record of all monitoring events and analytical data in the operating record.
- 29. After completion of the post-closure monitoring period, in accordance with Rule 15A NCAC 13B .1627, and completion of the corrective action program, the Section will determine if further monitoring and post-closure maintenance will be required.

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GROUNDWATER CORRECTIVE ACTION PROGRAM SPECIFIC CONDITIONS

- 30. Pursuant to Rule 15A NCAC 13B .1637, the permittee must implement a corrective action program to remediate elevated constituents in groundwater in accordance with the approved Corrective Action Plan (CAP), Attachment 1, Part II, Document No. 4 (Doc ID 16358). The approved corrective action program consists of Monitored Natural Attenuation (MNA) coupled with a passive gas venting system, institutional controls, and capping for the source control. Any proposed modifications to the approved CAP must be submitted to the Section and approved prior to implementation.
- 31. The monitoring network for the corrective action program consists seven (7) ground water wells [MW-1(background well), MW-3, MW-4, MW-6, MW-9, MW-11, & MW-12], unless otherwise specified by the Section. Sampling frequency and constituents to be analyzed must be conducted in accordance with the approved CAP.
- 32. The permittee must provide a Corrective Action Evaluation Report to describe of the performance and effectiveness of the implemented corrective action program, including a technical evaluation of MNA as a remedy at the facility. The first report must be submitted in accordance with Permit Condition 1, Attachment 3, Part I. Subsequent reports are required every 5 (five) years unless otherwise specified by the Section.
- 33. After the MNA baseline has been established, an EPA approved MNA screening model is required at least annually to simulate the groundwater remediation at the facility and determine the mass flux and mass balance. The model must be submitted annually with a monitoring report.
- 34. If the objectives of the corrective action program are not being met, as specified in the approved CAP, Rules, or as determined by the Section, the permittee must immediately implement the Contingency Plan in the approved CAP.
- 35. If constituents in groundwater migrate beyond the landfill property boundary, or it is suspected to have occurred based on sampling results near the property boundary, the permittee must immediately notify all persons in writing who own land or reside on land that directly overlies any part of the contaminant plume with details of the migration. The permittee must mitigate further releases to the groundwater, reduce threats to human health and the environment, and immediately implement the Contingency Plan in the approved CAP.
- 36. If the corrective action program is modified to include an active groundwater treatment system:
 - a. The permittee must operate the groundwater treatment system in a manner that will prevent spills, releases or other adverse affects to human health and the environment.

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- b. The permittee must maintain an inspection schedule for the inspection of all parts of the groundwater treatment system as outlined in the approved CAP.
- c. The permittee must train all personnel operating the groundwater treatment system as outlined in the approved CAP.
- d. The permittee must sample the groundwater in the impacted aquifer, the groundwater as it enters and exits the groundwater treatment system and measure the volume and rate of flow of groundwater through the groundwater treatment system as indicated in the approved CAP and its addendum. The data must be submitted to the Section with a monitoring report.
- 37. Institutional controls (deed recordation, land and groundwater use restrictions) must be implemented as part of a groundwater treatment system pursuant to NCGS 143B-279.9 and 143B-279.10. The land and groundwater use restrictions will be imposed on the permitted facility and any buffer property that has been acquired to reduce or eliminate the danger to public health or the environment posed by the presence of contamination on the property. The permittee must submit to the Section, within 180 days of notified to do so, a survey plat, in accordance with the requirements of NCGS 143B-279.10, and as directed by the Section.
- 38. The permittee must continue to operate the corrective action program until the 15A NCAC 2L Groundwater standards and the GPS have been met at all points within the plume of contamination that lie beyond the relevant point of compliance for three (3) consecutive year, in accordance with Rule 15A NCAC 13B .1637.

LANDFILL GAS MONITORING REQUIREMENTS

- 39. Landfill gas monitoring must be conducted at the facility in accordance with the approved landfill gas monitoring plan and Rule 15A NCAC 13B .1626 (4). The permittee must sample landfill gas quarterly unless otherwise required for corrective action or specified by the Section.
- 40. A total of nine (9) landfill gas probes (MM-1, MM-3, MM-5, MM-7, MM-8, and MM-10 through MM-13) comprise the approved monitoring network for the C&D unit and closed MSWLF (Attachment 1, Part II, Document No. 5), unless otherwise approved or specified by the Section.
 - a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any landfill gas monitoring probe or well.
 - b. A licensed geologist must be present to supervise the installation of landfill gas monitoring probes or wells. The exact locations, screened intervals, and nesting of the probes or wells must be established after consultation with the Section hydrogeologist prior to probe installation.

- c. Each landfill gas monitoring probe or well must be surveyed for location and elevation by a North Carolina Registered Land Surveyor.
- d. Each landfill gas monitoring probe or well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108 (o).
- e. Within thirty (30) days of the completed construction of each new landfill gas monitoring probe or well, a schematic of the probe or well, to include boring log, depth, and screened interval, must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned landfill gas monitoring probes and wells.
- f. Within thirty (30) days of the abandonment of a landfill gas monitoring probe or well, an abandonment record must be submitted to the Section. The boring must be abandoned in accordance with 15A NCAC 2C .0113(d) and be certified by a Licensed Geologist.
- g. All records of landfill gas monitoring probe or well installation, repair, abandonment, and all other pertinent activities associated with each landfill gas monitoring probe or well must be placed in the operating record.
- h. A readily accessible, unobstructed path must be maintained so that landfill gas monitoring probes or wells are accessible using four-wheel drive vehicles.
- 41. All landfill gas monitoring must be conducted by properly trained personnel. Methane monitoring must include interior monitoring of onsite buildings.
- 42. Landfill gas monitoring reports must be added to the facility's operating record within 7 days of the monitoring event, and must include a description of the monitoring method used, the sampling results of each well and onsite buildings in percent of the lower explosive limit (LEL), date of monitoring, weather conditions, calibration report, and signature of the sampling personnel.
- 43. The permittee must maintain records of all landfill gas monitoring events in the operating record, in accordance with Rule 15A NCAC 13B .0542 (n).
- 44. If landfill gas monitoring reveals detections of methane of at least 25 percent of the LEL in onsite buildings, or detections of LEL at the compliance boundary, the permittee must comply with the requirements of Rule 15A NCAC 13B .1626 (4).

REPORTING REQUIREMENTS

45. Copies of this permit, the approved plans, and all records required to be maintained in the operating record by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.

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- 46. The permittee must maintain records of the following. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.
 - a. The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material used as alternate periodic cover, and (iii) recyclable material
 - b. Daily records of waste received and origins of the loads.
- 47. On or before August 1 annually, the permittee must submit an annual facility report to the Section, on forms prescribed by the Section.
 - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
 - b. The annual report must list the amount of waste received and landfilled in tons and be compiled:
 - i. On a monthly basis.
 - ii. By county, city or transfer station of origin.
 - iii. By specific waste type.
 - iv. By disposal location within the facility.
 - v. By diversion to alternative management facilities.
 - c. A measurement of volume utilized in the C&D cells must be performed during the second quarter of the calendar year. The date and volumes, in cubic yards, must be included in the report.
 - d. The amount of C&D waste, in tons from scale records, disposed in landfill cells since December 30, 1997, through the date of the annual volume survey must be included in the report.
 - e. The tons of C&D waste recycled, recovered or diverted from disposal including a description of how and where the material was ultimately managed, as applicable, must be included in the report.
 - f. The completed report must be forwarded to the Regional Environmental Senior Specialist for the facility by the date due on the prescribed annual facility report form.
 - g. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Environmental Specialist by the date due on the prescribed annual facility report form.

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PART III: CLOSURE AND POST-CLOSURE OF THE C&DLF

- 48. The permittee must conduct closure and post-closure activities in accordance with the approved plans (Attachment 1, Part II, Document Nos. 1 & 5) and Rule 15A NCAC 13B .1627. An updated closure and post-closure plan must be submitted for approval at least ninety (90) days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the C&DLF in accordance with all rules in effect at that time. At a minimum, the plan must address the following:
 - a. Design of a final cover system in accordance with Rule 15 NCAC 13B .1627 (c) or the solid waste management rules in effect at the time of closure;
 - b. Construction and maintenance/operation of the final cover system and erosion control structures; and
 - c. Surface water, ground water, and explosive gas monitoring.
- 49. If the minimum 30-year post-closure period ends before the groundwater corrective action program is terminated, pursuant to Rule 15A NCAC 13B .1627 (d)(2)(B), the post-closure care period shall be extended at least until such time as the required corrective action program has been completed.

PART IV: MISCELLANEOUS SOLID WASTE MANGEMENT UNIT SPECIFIC CONDITIONS

GENERAL CONDITIONS

- The Miscellaneous Solid Waste Management Units, as described in the following Permit Conditions are permitted to receive wastes from Lenoir County. Received wastes and recyclables shall be stored, stockpiled, or disposed in the designated areas as shown on Drawing No. F1/Sheet 3 of 7 in the approved Facility Plan (Attachment 1, Part II, Document No. 5). The permittee must obtain Section approval before re-locating any of these operations or revising the operations.
- The permittee must operate and manage the Miscellaneous Solid Waste Management Units according to the following Permit Conditions, all applicable statutes and rules of the State of North Carolina and the Operation Plan included in Attachment 1, Part II, Document No. 5. Any revisions to the approved plan shall be approved by the Section, prior to implementation.
- Wastes received and product stored shall be maintained in reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.
- 53. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste is deemed to be leachate and shall be contained on-site or properly treated prior to discharge.

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- 54. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.
- 55. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.
- 56. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, and vermin.
- 57. The permittee must keep the contact information of the contract haulers and recyclers of the recyclable in the operating record.

OPERATIONAL CONDITIONS – SMALL TYPE 1 COMPSTING AREA

- 58. The facility encompassing less than two (2) acres in size is permitted to process or store less than 6,000 CY of material per quarter in accordance with Rule 15A NCAC 13B .1402(f)(6).
- 59. The facility is permitted to receive land clearing debris, yard waste, or wooden pallet as defined in Rules 15A NCAC 13B, .0101(23) and .0101(56), and NCGS 130A-290(44a), respectively.
- 60. The permittee must conduct random waste screening processes according to the approved operations plan (Document No. 5, Attachment 1, Part II) to ensure that prohibited wastes are identified and removed to designated areas (either at on-site or off-site facilities) for proper disposal. The permittee must operate the unit in accordance with the requirements set forth in Rule 15A NCAC 13B .1404 and approved operations plan (Document No. 5, Attachment 1, Part II).
- A 25-feet clear distance or perimeter must be maintained from drainage ditches and swales, around processing area, and between stockpiles of raw wastes and ground material to allow for inspection, monitoring temperature, and fire fighting.
- 62. The permittee must monitor and control the stockpile temperature which shall not exceed 150 degree of Fahrenheit if the ground material is stored at the designated area in a period more than thirty (30) days.

<u>OPERATIONAL CONDITIONS – WOODEN PALLET STORAGE AND PROCESSING AREA</u>

63. The unit encompassing an area with a 50-feet diameter is permitted to receive, temporary store, and process wood pallets up to a maximum quantity of 925 cubic yards. Wooden pallet is defined in NCGS 130A-290(44a) may be chipped or mulched into products for boiler fuel or on-site landscaping use.

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- 64. The permittee must maintain the stockpiles of wooden pallets or chipped products less than 10 feet in height and a 25-feet clear distance or perimeter from drainage ditches and swales, around processing area, and between stockpiles of raw wastes and ground material to allow for inspection, monitoring temperature, and fire fighting.
- 65. The permittee must monitor and control the stockpile temperature of ground material/product which shall not exceed 150 degree Fahrenheit according to the approved operations plan (Document No. 5, Attachment 1, Part II) if the ground material is stored at the designated area in a period more than thirty (30) days.
- 66. The maximum on-site stockpile duration of wooden pallets or chipped products is one year after receipt or process the pallets.

<u>OPERATIONAL CONDITIONS – WHITE GOODS DROP-OFF AREA AND SCRAP METAL TRANSFER PAD</u>

- 67. White goods, as defined in NCGS 130A-290(44) shall initially be placed at the White Goods Drop-Off Area for the proper removal of chlorofluorocarbon refrigerants (Freon) by well-trained personnel prior to temporarily storing in a 40 CY roll-off box at Scrap Metal Transfer Pad.
- 68. Freon-free white goods and scrap metal can be directly placed in a 40 CY roll-off box at Scrap Metal Transfer Pad.
- 69. The permittee must have a contractor to remove the white goods and scrap metal off-site when the 40 CY roll-off box is completely full and shall maintain the contact information of contract haulers/recyclers in the operating record.

PART V: POST CLOSURE CONDITIONS FOR THE UNLINED MSWLF UNIT

- 70. The unlined MSWLF unit (below the active C&DLF) was closed in 1998, and the construction of the final cover system was completed and certified in March 2000. Post-closure maintenance and monitoring of the landfill unit must be conducted in accordance with Documents 1 and 5, Attachment 1, Part II, and the North Carolina Solid Waste Management Rules.
- 71. The permittee must maintain the integrity and effectiveness of the cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, leachate outbreaks, or other events; preventing surface water from impounding over waste; and preventing run-on and run-off from eroding or otherwise damaging the cap system. As issues are resolved, notations should be documented and placed in the operating records.
- 72. Post-closure use of the property is subject to review and approval by the Section and must not disturb the integrity of the cap system, or the function of the monitoring systems. The Section may approve any other disturbance if the owner or operator demonstrates that

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disturbance of the cap system, including any removal of waste, will not increase the potential threat to human health or the environment.

73. Any proposed lateral expansion to the closed C&DLF unit and/or the unlined MSWLF unit would be considered a new landfill for purposes of Solid Waste Management permitting.

- End of Permit Conditions -

I do hereby certify that the attached PERMIT TO OPERATE is an exact and true original of PERMIT NUMBER 54-03 for the Lenoir County C&D Landfill.

Ming-Tai Chao, P.E.
Environmental Engineer II
Solid Waste Section
Division of Waste Management

North Carolina	
Wace County	
I, Bethy Jo Stanfield, Notary Publi	ic for Wake County,
North Carolina, do hereby certify that Ming-Tai Chao, Waste Section, Division of Waste Management, NCDI day and acknowledge the due execution of the foregoin	ENR, personally appeared before me this
Witness my hand and official seal,	
This the 2 day of <i>April</i> , 20 12.	Betty NO > 10 to 1
OFFICIAL SEAL	PU PU
NOTARY PUBLIC (The Control of the Co

My commission expires <u>December 29</u>, 2014

Note to Register of Deeds: This certified original permit shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified original affixed with the Register's seal and the date, book, and page number of recording shall be returned to the Permitting Branch Supervisor, Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

NOTE: THE SPACE ABOVE IS FOR THE REGISTER OF DEEDS USE

THIS PAGE IS PROVIDED FOR RECORDATION PURPOSES. THE ENTIRE DOCUMENT,
INCLUDING THIS PAGE, SHOULD BE RECORDED IN THE GRANTOR INDEX UNDER

THE NAME OF THE LANDOWNER FOR THE PARCEL OF PROPERTY LOCATED IN
LENOIR COUNTY AND SAID PROPERTY BEING OWNED BY LENOIR COUNTY AND

FURTHER IDENTIFIED BY THE DEEDS RECORDED AS LISTED BELOW:

Lenoir County, N.C. Register of Deeds				
Book	Page	Grantor	Grantee	Acres*
		Tyson H. Creech &		
674	30	Wife Laurah H.	Lenoir County	108.94
Total Site Acreage: 108.94 acres				

^{*} The landfill facility property, including buffers, occupies approximately 108.94 acres. The closed MSWLF is approximately 47 acres. The actual disposal area of the C&DLF is approximately 18 acres and located on top of the closed MSWLF.

THE PURPOSE OF THIS RECORDATION IS TO NOTIFY FUTURE BUYERS OF SAID PROPERTY THAT A LANDFILL EXISTS ON THE PROPERTY.